IN THE CLAIMS:

Please add the following new claims:

16. An isokinetic sampling system comprising:

(A) a probe that is configured for insertion into a fluid stream;

(B) an internal pressure tap that is configured to provide an indication of a static pressure within said probe;

(C) an external pressure tap that is configured to provide an indication of a static pressure in a portion of the fluid stream that surrounds said probe; and

(D) a flow control device that is configured to adjust a fluid flow rate through said probe;

(E) a controller that is operable to control said flow control device, in response to pressure measurements obtained from said external and internal pressure taps, to maintain at least substantially equal static pressures internally of and externally to said probe.

17. The sampling system as recited in claim 16, wherein said external pressure tap is formed in a tube located on an external surface of said probe.

18. The sampling system as recited in claim 16, further comprising at least one additional external pressure tap configured to provide an indication of a static pressure in said portion the fluid stream.

19. The sampling system as recited in claim 18, wherein said external pressure taps are arranged relative to one another so as to substantially cancel the effects of any misalignment between the direction of flow in the stream and the orientation of the pressure taps.

20. The sampling system of claim 16, further comprising a differential pressure sensor that is coupled to said external pressure tap, said internal pressure tap, and said controller, said differential pressure sensor generating a signal indicative of a pressure differential between the interior of said probe and the exterior of said probe and transmitting said signal to said controller.

B2 Cont'd

21. The sampling system as recited in claim 16, further comprising a dilution tunnel and an exhaust line having an inlet connected to said probe and an outlet opening into said dilution tunnel, and wherein said flow control device comprises a damper that controls an ambient fluid flow rate though said dilution tunnel.

22. The sampling system as recited in claim 16, wherein said flow control device comprises a variable speed pump that is coupled to said probe.

23. The sampling system as recited in claim 16, wherein said controller is a closed-loop feedback controller.

24. The sampling system as recited in claim 17, wherein said internal pressure tap is located adjacent a tip of said probe.

25. An isokinetic sampling system comprising:

(A) a probe that is configured for insertion into a fluid stream;

(B) an internal pressure tap that is configured to provide an indication of a static pressure within said probe;

B2 cont'd

(C) an external pressure tap that is located on said probe and that is configured to provide an indication of a static pressure in a portion of the fluid stream that surrounds said probe; and

(D) a flow control device that is configured to adjust a fluid flow rate through said probe;

(E) a controller that is operable to control said flow control device, in response to pressure measurements obtained from said external and internal pressure taps, to maintain at least substantially equal static pressures internally of and externally to said probe.

26. An isokinetic sampling system comprising:

(A) a probe that is configured for insertion into a fluid stream;

(B) an internal pressure tap that is configured to provide an indication of a static pressure within said probe at a location adjacent a tip of said probe;

(C) an external pressure tap that is configured to provide an indication of a static pressure in a portion of the fluid stream that surrounds said probe at said location adjacent said tip of said probe; and

(D) a flow control device that is configured to adjust a fluid flow rate through said probe;

B2 Cont'd

(E) a controller that is operable to control said flow control device, in response to pressure measurements obtained from said external and internal pressure taps, to maintain at least substantially equal static pressures internally of and externally to said probe.

27. A sampling method comprising:

(A) inducting a fluid sample into an interior of a probe disposed in a fluid stream;

(B) measuring a static pressure of fluid flowing through the interior of said probe;

(C) measuring a static pressure of a portion of the fluid stream surrounding said probe; and

(D) based on the static pressure measurements, adjusting a fluid flow rate through said probe to at least substantially eliminate a static pressure differential between the interior and exterior of said probe.

28. The method as recited in claim 27, further comprising determining, based on the measuring steps, a pressure differential between the interior of said probe and the exterior of said probe.

B2 end

29. The method as recited in claim 28, wherein the adjusting step comprises adjusting operation of a flow control device using a closed-loop feedback control scheme.

30. The method as recited in claim 29, wherein the adjusting step comprises decreasing a fluid flow rate through said probe if the determined pressure differential is positive, increasing the fluid for rate through said probe if the determined pressure differential is negative, and maintaining the fluid flow rate through the probe at least substantially constant if the determined pressure differential is substantially zero.

31. The method as recited in claim 27, further comprising directing fluid from said probe, through an exhaust conduit located at least in substantial part external to said fluid stream, and into a sampling device.

REMARKS

New claims 16-31 have been added. Claims 1-11 were cancelled in the Preliminary Amendment submitted with this application. The new claims 16-31 were added to provide different permutations of protection than that sought by the original claims 1-11 or the claims 12-15 added by Preliminary Amendment. In addition, the specification has been amended to provide *ipsus verbus* or near *ipsus verbus* for the new